PREP SESSION PHYSIOLOGICAL MONITORING

A Personal Resources Exploration Program (PREP) session is a uniquely personalized audio-guidance process. We use a J&J I-300-C2 Physiological Monitoring System during PREP sessions to monitor skin potential voltage (**SPV**), peripheral skin temperature (**TEMP**), and galvanic skin response (**GSR**).

The following explanations describe these measurements and illustrate how we interpret and use them during PREP sessions. The graphs illustrate general tendencies and should not be held as goals for an “ideal" session. Highly individualized patterns are interpreted on a case-by-case basis using established parameters.

Electrical activity on the skin has two origins: that due to sweat gland activity (sudorific) and that due to other causes (non-sudorific). It is important to discriminate between the two origins. Sudorific skin potentials (see Figure 3 – GSR, on the back of this page) have long been associated with levels of anxiety, mental arousal, and emotional reactivity. Non-sudorific skin potentials (see Figure 1 – SPV, below) have been associated with ovulation, tissue regeneration and atypical growth, as well as changes in consciousness.

SPV: The direct current voltage between two electrodes on the fingers is measured. Voltage differences of relative short duration are referred to as skin-potential responses. Voltage differences of long duration are referred to as skin-potential levels. Records of both of these non-sudorific electric variables are called skin potential voltage (SPV) measurements. Independent SPV response variations or waveforms indicate subjective mental activity. Changes in consciousness are indicated by substantial changes in SPV levels. Occasionally, SPV levels reverse polarity. These polarity reversals indicate changes in the participant's perspective or venue. **Figure 1 – SPV** shows changes in skin-potential levels during a PREP session. In this illustration, a polarity reversal (+ to -) is recorded early into the session.

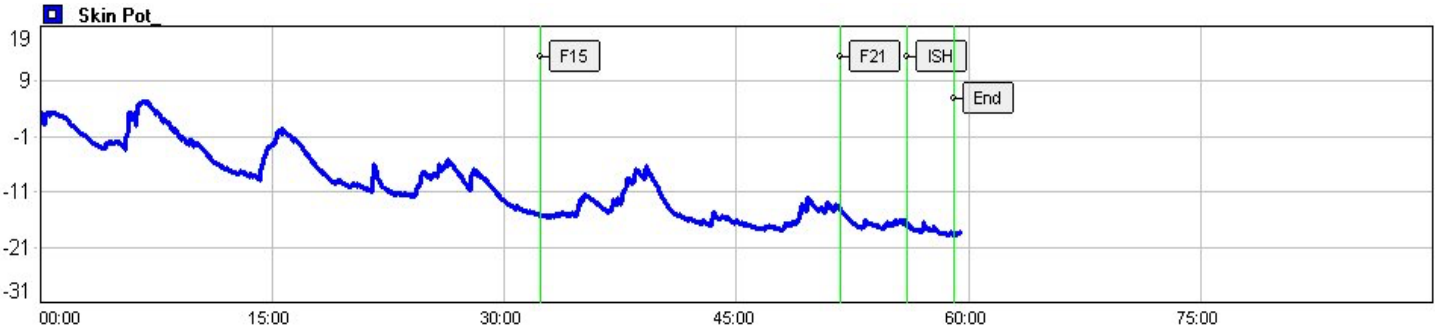

Figure 1 – SPV

TEMP: Warming of the extremities (hands and feet) is a strong indicator of physical relaxation. This peripheral warming is due to increased blood flow through the capillaries as a result of muscular relaxation. This natural warming is sometimes referred to as the relaxation response. Peripheral warming is also a reliable indication associated with theta brainwave states. Individuals have been known to move into a theta brainwave rhythm during peripheral warming to 95ºF for a few minutes. During PREP sessions, hand and finger temperature generally rises as states of consciousness favorable to perceptual experiences arise. **Figure 2 – TEMP** shows typical warming during a PREP session.

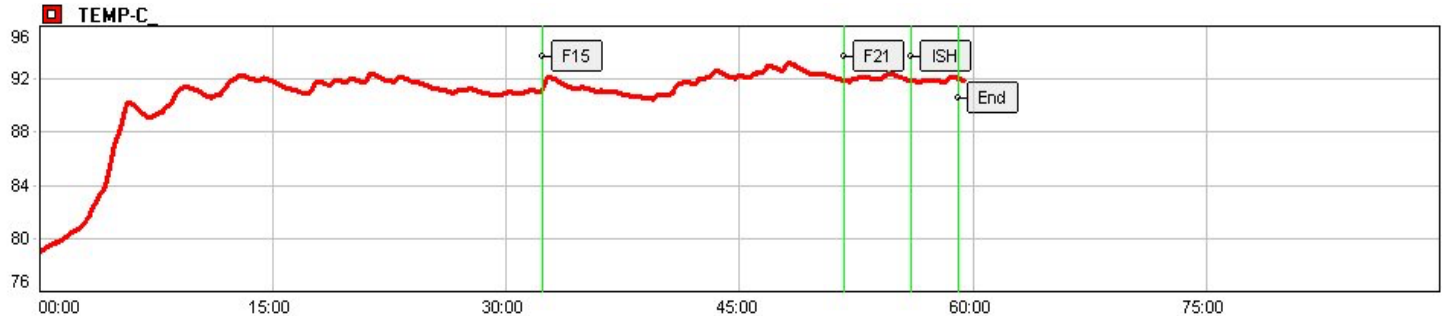

Figure 2 – TEMP

GSR: In the case of sudorific activity, skin resistance or its inverse, skin conductance, is measured by applying a small, constant current through two electrodes placed on the fingers. Changes in resistance of short duration typically reach a peak in about one or two seconds and are referred to as galvanic skin responses (GSR). The general amount of resistance that changes slowly is called the skin-resistance level. As GSR conductance decreases, an individual becomes less anxious, mentally calm, and emotionally passive. **Figure 3 – GSR** illustrates the changing skin-conductance level during a PREP session.

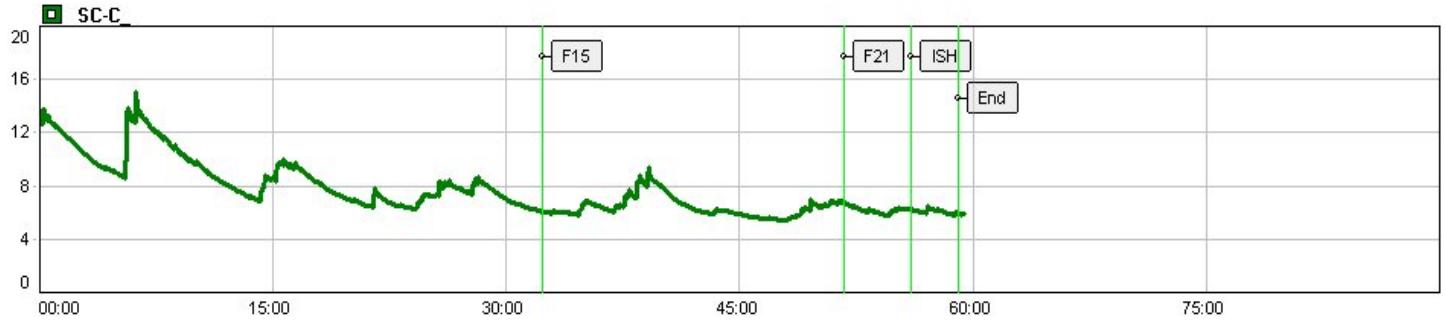

Figure 3 – GSR

The use of physiological monitoring is especially beneficial to real-time facilitation of PREP sessions. Monitors can tell when an individual is relaxed, when that individual "moves" from experience to experience, and when to inquire about their perceptions and understandings. After a PREP session, the participants are provided a complete report of their physiological changes during their session.

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